

L 18569-66

ACC NR: AP6002702

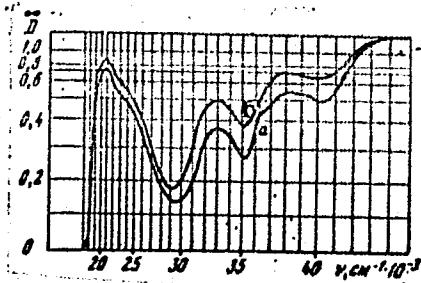


Fig. 1. UV spectra:
(a) - n - boranylphenyl-anisole-naphthol-2, (b) - p-boranyl-phenyl-anisole-naphthol-2; d = 0.5
cm, c = 1. x 10⁻⁴ M. solvent
ethanol.

Orig. art. has: 2 tables and 2 graphs.

SUB CODE: 07/ SUBM DATE: 09Apr65/ ORIG REF: OCL/

OTH REF: 002

Card 2/2 SMC

L 3397-66 EWT(m)/EPF(c)/EWP(j)/EWA(c) RPL WW/JW/JWD/RM

ACCESSION NR: AP5024218

UR/0020/65/164/003/0577/0580

36
35
8

AUTHORS: Zakharkin, L. I.; Kalinin, V. N.

TITLE: Nitration of phenylborane, phenylborane carbonic acid, and phenylneoborane

SOURCE: AN SSSR. Doklady, v. 164, no. 3, 1965, 577-580

TOPIC TAGS: boranorganic compound, nitration phenylborane, phenylneoborane

ABSTRACT: The nitration of phenylborane, phenylborane carbonic acid, and phenylneoborane was studied in order to elucidate the directive properties of the borane nucleus during electrophilic substitution in the benzene ring. The nitration was carried out in CCl_4 at room temperature with a 1:3 mixture of HNO_3 and H_2SO_4 .

The investigation is an extension of previous studies on this system, by L. I. Zakharkin, V. I. Stanko, i dr. (Izv. AN SSSR, OKhN, 1963, 2236). Melting points and reaction yields for the synthesized compounds are presented. It is concluded that the borane and neoborane groups possess electron-acceptor properties. The absence of the ortho-isomer of nitration is attributed to the large steric hindrance of the borane nucleus which prevents an ortho substitution in the benzene ring. Orig. art. has: 12 equations.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy, Akademii nauk SSSR
Card 1/2

L 3397-66

ACCESSION NR: AP5024218

(Institute for Hetero-organic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 11Feb65

ENCL: 00

SUB CODE: OC,GC

NO REF SOV: 003

OTHER: 004

Card 2/2 *hd*

L 25833-66 EWT(m)/EWP(j)/T/EWA(h) WW/JW/WB/RM

ACC NR: AP6007124

SOURCE CODE: UR/0079/6B/036/002/0362/0363

AUTHOR: Zakharkin, L. I.; Kalinin, V. N.

ORG: none

TITLE: Isomerization of B-halobarenes into B-haloneobarenes

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 362-363

TOPIC TAGS: organoboron compound, halogenated organic compound, isomerization, isomer

ABSTRACT: It was found that on isomerization, B-chlorobarene, m. p. 224°-225°C, forms two B-chloroneobarenes, (Ia), m. p. 190°-191°C, and (Ib), m. p. 215°-216°C, and that B-bromobarene, m. p. 190°-191°C, yields two B-bromoneobarenes, (IIa), m. p. 153°-154°C, and (IIb), m. p. 171°-172°C. (Ib) is identical to the B-chloroneobarene and (IIb) to the B-bromoneobarene which are formed by halogenation of neobarene in the presence of AlCl₃. Isomerization of B-dichlorobarene, m. p. 262°-263°C, formed three B-dichloroneobarenes, of which two were isolated: (IIIa), m. p. 132°-133°C, and (IIIb), m. p. 187°-188°C. The third isomer is identical on the chromatogram to B-dichloroneobarene, m. p. 217°-218°C, obtained by chlorinating neobarene in the presence of AlCl₃. Halogenation of neobarene in the presence of AlCl₃ also forms B-trihalo- and B-tetrahalo-neobarenes: thus, B-tetrabromoneobarene, m. p. 324°-325°C, was obtained. Photomono-chlorination of neobarene forms the two B-chloroneobarenes (Ia) and (Ib).

SUB CODE: 07/ SUBM DATE: 23Aug65/

ORIG REF: 000/ OTH REF: 000

Card 1/1 ✓

UDC: 546.271 : 542.952.1

I. 09984-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)
ACC NR: AP6035644

SOURCE CODE: UR/0280/66/000/005/0027/0032

AUTHOR: Kalinin, V. N. (Leningrad)

39

ORG: none

TITLE: On one isoperimetric problem of the optimum control synthesis

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 5, 1966, 27-32

TOPIC TAGS: optimal control, optimal control synthesis, isoperimetric control synthesis, automatic control system

ABSTRACT: The problem of the synthesis of optimal control of a system (determining the optimal control of a function u not as a function of time t , but as a function of the state x of the system) described by a system of ordinary differential equations is analyzed under the condition that the control process u is constrained by the condition (isoperimetric)

$$\int_0^{\mu} g_{\mu}(x, u) dt = \beta_{\mu}, \quad \mu = 1, \dots, m, \quad (1)$$

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L 09984-67

ACC NR: AP6035644

where β_μ are certain given constants and $g_\mu(x, u)$ is a given function. It is shown that in this case the optimal control u_{opt} at any instant t is not a function of the state x only, but a functional of $x(\tau)$ and $u(\tau)$ on the interval $[0, t]$. A general expression for u_{opt} is presented, but its more explicit form is derived for one simplest particular case of this type of problems. It is assumed that a point of constant mass m moves along a straight line in a uniform force field under the action of the controlling force F and under the assumption that the controlling acceleration $u = F/m$ is constrained by an expression

$$|u| \leq c, \quad (2)$$

where c is a constant. The control u is sought which takes the point from its initial state to the final state in a given time T , satisfies the constraint (2) and minimizes the performance functional

$$I = \int_0^T |u| dt. \quad (3)$$

The fixation of the length of the control process T is considered as an isoperimetric condition. Using general optimal control theory, it established that the control to be determined in the domain of its existence is a piece-wise constant function which

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ACC NR: AP6035644

assumes the values 'c and 0. Then, the problem is reduced to determining switching on and switching off control at instants 'c and 0, respectively. It is shown how this problem can be solved, and final expressions for the optimal control are derived which represent a complete solution of the problem. Orig. art. has: 26 formulas.

SUB CODE: 12/ SUBM DATE: 08May65/ ORIG REF: 003/ ATD PRESS: 5105

Card 3/3 egk

SINITSA, Igor Ivanovich; KALININ, V.P., red.; MEKHOV, N.V., red.; OZHRIMTSKAYA, A.L., red. izd-va; KARASOV, A.I., tekhn. red.

[Two-sided shapes of variable crosssection; designing] Dwustoronne periodicheskie profili; konstruirovaniye. Moskva, Gos. nauchno-tehn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 44 p.
(Rolling (Metalwork)) (MIRA 11:10)

S/137/61/000/007/010/072
A050/A101

AUTHOR: Kalinin, V. P.

TITLE: Theoretical investigation of the effect of tension upon the longitudinal and transversal deformation during hot rolling

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1961, 2, abstract 7D9
("Tr. Konferentsii: Tekhn. progress v tekhnol. prokathn. proiz-v".
Sverdlovsk, Metallurgizdat, 1960, 535-560)

TEXT: The dependence of longitudinal and transversal deformation of a strip under rolling upon forward and back tension was established theoretically by dividing the displaced volume into deformation zones determined according to the principle of least action. It was assumed that: the influence of the chemical composition and the temperature are taken into account by the conventional σ_s and the coefficient of friction, being constant. The conditionality of these assumptions for high alloy steels is emphasized. A general and an approximate method of solution are given. Simple expressions are obtained for determining the specific pressure, the position of the neutral section, the total and the mean pressure of the metal on the rolls, the coefficient of friction. A

Card 1/2

Theoretical investigation of the effect ...

S/137/61/C00/007/010/072
A060/A1C1

formula for the spread is derived, differing from existing formulae in that in it the spread is a function of the forward and the rearward tension and not of the coefficient of friction. Thanks to the introduction of a geometrical function of the deformation seat, one graph showed the pattern of variation of the spread, stretch, forward flow and creep. The computed and the known experimental data showed good agreement.

Ya. Mizis

[Abstracter's note: Complete translation]

Card 2/2

POBEDIN, Ivan Sergeyevich; DROZD, Vladimir Grigor'yevich. Prinimali
uchastiye: FEDIN, V.P., inzh.; KALININ, V.P., kand. tekhn. nauk;
ASTAKHOV, I.G., red.; BRINZA, V.N., red.izd-va; ISLINT'YEVA, P.G.,
tekhn. red.

[Production of merchant shapes] Proizvodstvo sortovoi stali. Mo-
skva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metal-
lurgii, 1962. 248 p. (MIRA 15:1)
(Rolling (Metalwork))

DRUZHININ, N.N., doktor tekhn. nauk; KALININ, V.P., kand. tekhn. nauk;
KHOTULEV, V.K., inzh.

Selection of rolling methods on continuous section mills.
Stal' 24 no.8:729 Ag '64. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut metallurgicheskogo mashinostroyeniya.

ACC NR: AF/004143

SOURCE CODE: UR/0051/67/022/001/0123/0126

AUTHOR: Kalinin, V. P.; Iyubimov, V. V.

ORG: none

TITLE: Influence of misalignment of laser cavity mirrors on the angular distribution of laser emission

SOURCE: Optika i spektroskopiya, v. 22, no. 1, 1967, 123-126

TOPIC TAGS: solid state laser, neodymium glass laser, electrooptic effect, image converter, laser cavity, beam divergence

ABSTRACT: The authors measured the laser beam divergence angle and the deviation of the beam from a perpendicular direction to the plane of the mirror, as functions of the misalignment of the mirrors for different resonator lengths (500 - 2800 mm) and different resonator diameters (2.6 - 15 mm). A neodymium-glass laser was used. The laser emission was photographed through an electrooptical converter whose cathode was placed in the focal plane of the lens. In the case of small misalignment (not exceeding $\alpha_0 = 2\lambda^2 l/d^3$, where l is the length and d the diameter of the cavity and λ is the wavelength), the broadening of the angular distribution varies linearly from λ/d at zero misalignment to $2\lambda/d$ at a misalignment angle α_0 ; this is in good agreement with theoretical results by one of the authors (Iyubimov, Opt. i spektr. v. 21, 224, 1966). In the case of larger misalignment angles the radiation becomes distributed over individual discrete directions, the angle distance between which is equal to

Card 1/2

UDC: 621.375.9: 535

ACC NR: AP7004143

double the misalignment angle. A plot of the angular distribution against the relative misalignment shows that the former increases like the cube root of the relative misalignment angle. The deviation of the beam from the direction normal to the surface of the mirror is approximately equal to $(da/l)^{1/2}$. All the results agree well with the earlier theoretical studies and with earlier experiments by the authors (Opt. i spektr. v. 19, 286, 1965). Measurements of the beam deviation make it possible to estimate the losses in the resonator, and these results agree with calculations by L. A. Vaynshteyn (ZhETF v. 44, 1050, 1963). Orig. art. has: 4 figures.

[WA-14] [02]

SUB CODE: 20/ SUBM DATE: 18Aug65/ ORIG REF: 004/ OTH REF: 001

Card 2/2

KARASEV, L.V.; GOROKHOV, G.A., slesar'; KALININ, V.P., slesar'.

Remodeling small PD trimmers. Suggested by L.V.Karasev, G.A.
Gorokhov, V.P.Kalinin. Rats.i izobr.predl.v stroi. no.14:
28-30 '60.
(MIRA 13:6)

1. Glavnnyy mekhanik derevoobdelochnogo zavoda No.3 tresta
Stroydetal'-shoýdetal-82 Glavleningradstroya (for Karasev).
(Saws) .

KALININ, V. P.

Kalinin, V. P.

"Investigation of drawing of profiles and loop-formation in discontinuous rolling." Min Heavy Machine Building (TsNIITMash). Moscow, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences).

SO: Knizhnaya letopis'
No. 25, 1956, Moscow

Kalinin, L. S. inzhener.

Mobile transformer substation on 100-180 kva, 6 kv. Energetik 5
no. 6125 Je '57. (MLRA 10:2)

(Electric transformers)

L 63782-55 EWA(k)/FRD/EWT(1)/ENP(a)/EWP(c)/EEC(Y)-2/ENP(1)/T/HMP(x)/EMP(b)/
EWA(s)-2/EWA(h) S CTB/ID P/C WG/WH

ACCESSION NR.: AP5019765

UR/0051/65/019/002/call16/call17
621.5"9.9-SP-4

Chlorophyll a, b, and carotenoids in *Leucosphaera* sp. and *Leucococcum* sp. from Lake Tanganyika, Tanzania

SOURCE Optika i spektroskopiya, v. 13, no. 2, 1965, 286-297

ABSTRACT: Data are presented on the loss arising in a laser resonator when the mirror tilt angle is relatively large ($1\text{--}2^\circ$). The tests were made on a neodymium-laser with bleached ends, using rods of various diameters and lengths. The

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000620110008-3"

Card 1/2

L 63381-65

ACCESSION NR: AP5019765

ASSOCIATION: none

SUBMITTER: 24 JUL 64

ENCL: 00

FILE NUMBER: 64-765

NO. OF PAGES: 24

OTHER: 002

SEARCHED: 4/26/64

Card 2/2

KORNEVA, V.B. [Kornieva, V.B.]; KALININ, V.R.; LOBANOV, G.A. [Lobanov, G.A.];
ZHIZHNOVA, N.A. [Zhizhynova, N.O.]

Use of synthetic fibers in the manufacture of Gobelin fabrics.
Leh. prom. no.4:9-10 O-D '65. (MIRA 19:1)

KATINOV, V.S.

The equations of the nonlinear theory of the plane, thicknesses for the separate plane half-wave, are solved by the method of successive approximations.

In the first approximation the sagging is taken to be one half wave of a sinusoid in both directions. Numerical results are obtained in the second approximation. It is shown that an increase in the number of half waves decreases the reduction of plane to compression.

Tables are presented of the reduction coefficients for the separate half-waves of thicknesses according

H. I. Kostinov
Courtesy Refraction Bureau, USSR
Translation Courtesy Ministry of Supply, England

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132

FILIN, Anatoliy Petrovich; SOKOLOVA, Antonina Stepanovna; KALININ, K.G.,
redaktor; VOLCHOK, K.M., tekhnicheskiy redaktor

[Structural mechanics in shipbuilding] Stroitel'naya mekhanika
korablia. Leningrad, Izd-vo "Rechnoi transport," Leningr. otd-
nie. Pt.1. [Bending and strength of rods and rod systems]
Izgib i ustoichivost' sterzhnei i sterzhnevых sistem. 1957.
443 p.

(Structures, Theory of) (Naval architecture) (MIRA 10:11)

KALININ, V.S., kand.tekhn.nauk

Nonlinear forced oscillations of prismatic rods and extended rectangular plates under the effect of the harmonic vibration of stanchions. Sudostroenie 25 no.12:11-16 D '59. (MIRA 13:4)
(Vibration (Marine engineering))
(Hulls (Naval architecture))

REPORT PRESENTED AT THE 1st ALL-UNION CONGRESS OF THEORETICAL AND APPLIED MECHANICS,

Moscow, 27 Jan - 3 Feb '60.

138. N. A. Gulyain (Russia) Problems of the theory of plasticity
and related topics.
139. Yu. S. Kabanov (Russia) Plastic-plastic vibrations of rods
and membranes.
140. F. S. Keldysh (USSR) The second non-linear, classical
problem of mechanics: problems of a very long
duration.
141. R. Mollard (France) On a method of solving the equations of
magnetoelectroelastic motion in the presence of
a magnetic field.
142. S.-J. Sun, T.-A. Shih (Taiwan) An engineering method for
the design of some plastic shells.
143. J. L. Mandel (USSR) The distribution of vertical
compressive stresses and strains in foundations in homogeneous
soils.
144. B. N. Peshin (Russia) Binding of nonlinear plates of
natural fibres.
145. E. I. Slobodcikov (Bulgaria) The effect of aging and weathering
on the mechanical properties of woods.
146. Yu. N. Slobodcikov (Bulgaria) On the theory of plasticity
and methods in the theory of plasticity.
147. E. A. Sopchenko (Russia) A procedure of determining an impact
load factor for large deformations.
148. R. A. Stavrenko (USSR) Some generalizations of the formula
of the theory of plasticity and its application to some
problems of hydrodynamics and hydrogeology.
149. Yu. N. Obraztsov (Russia) The state of a viscoplastic medium in a
cavity.
150. Yu. N. Obraztsov (Russia) On the static equilibrium of soils
in a cavity or on a slope.
151. Yu. V. Solyanik (Russia) On the influence of the surface properties of
the boundary of the body on the stability of the surface layers of the
soil under conditions of cyclic loading.
152. A. P. Fomenko (Russia) Stability analysis of thick plates and shells
under conditions of periodic variation of temperature.
153. Yu. S. Savenkov (Russia) Practical plasticity of electrical and
magnetic circuits.
154. Yu. D. Korobov (Russia) The influence of initial imperfections
of shells on the stability of thin elastic cylindrical shells
under compression.
155. N. F. Matveichikova (Russia) Plastic stability and post-buckling
behavior.
156. Yu. A. Kondratenko (USSR) The influence of the external variables of the
problem of large plastic strains on the internal variables of the
problem.
157. Yu. A. Kondratenko, I. A. Gol'den (Russia) Strength and plasticity
of structures on plastic foundations. The design of flexible plates and
thin elastic ribs.
158. Yu. A. Kondratenko (Russia) Binding of flexible plates and
shallow shells.
159. Yu. A. Kondratenko (Russia) On the theory of plastic theory
of plates.
160. M. O. Braginskii, Yu. N. Slobodcikov (Bulgaria) On the
theory of plasticity of thin-walled shells under variable
external specific weight and variable wall permeability.
161. Yu. A. Kondratenko (Russia) The plastic utilization of
anisotropic plates and shells. The plastic utilization of
shells. Yu. S. Savenkov (Russia) T. A. Savel'ev (USSR)
Relying on plasticity in dry friction.
162. P. V. Sopov (Russia) Internal stability of coupled arches
with flexible supports.
163. A. I. Danilevsky (USSR) On the theory of plane plastic
shells.
164. Yu. I. Pleshchinskii, T. S. Slobodcikov (Russia) Preparation of
soil for foundation.
165. Yu. N. Slobodcikov (Russia) The investigation of contact prob-
lems in the theory of plasticity by the method of singular
integral equations.
166. Yu. T. Isoperimetric Problems. The investigation of the admissible
area of shells as solved by the theory of plasticity.
167. A. Leontovich (Russia) Application of the methods of plastic
theory to some problems of the theory of elastic-plastic shells.
168. B. N. Lur'e (USSR) The investigation of rheological
properties of plastic materials.

16.3400

26516

S/044/61/000/004/031/033
C111/C222

AUTHOR: Kalinin, V.S.

TITLE: On a method for the solution of boundary value problems for ordinary and partial differential equations

PERIODICAL: Referativnyy zhurnal Matematika, no. 4, 1961, 28,
abstract 4 V 259. ("Tr. Nauchno-tekhn. o-va sudostroit.
prom-sti", 1960, vyp 35, 63-84)

TEXT: The author describes a variant of the direct method for the solution of boundary value problems. The solution of the ordinary differential equation

$$F(y^{(n)}, y^{(n-1)}, \dots, y', y; x) = f(x) \quad (1)$$

satisfying certain conditions for $x = \alpha$, $x = \beta$, is sought with the arrangement

$$y = \sum_{i=1}^{\infty} a_i \varphi_i(x) \quad . \quad (2)$$

where the $\varphi_i(x)$ form a complete system and satisfy the boundary
Card 1/2

On a method for the solution ...

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S/044/61/000/004/031/033
C111/C222

conditions, while the constants a_i must be determined. In practice the series (2) is replaced by a finite partial sum. For the determination of the a_i the author compares the values of both sides of (1) (in which the expressions (2) are substituted) and the values of their first derivatives with respect to x in certain points of the interval $[a, b]$. In a number of special cases the calculation of the a_i is simplified. A geometrical interpretation of the method is given. There is no estimation of the exactness of the method. Some numerical examples are considered in detail.

[Abstracter's note : Complete translation.]

Card 2/2

KALINIK, V.S. (Leningrad)

"Dynamics of buckling of shallow shells under static load"

report presented at the 2nd All-Union Congress on Theoretical
and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

L 01942-67 EWT(d)/T/EWP(1) IJP(c) GG/BB

ACC NR: AR6031709 SOURCE CODE: UR/0372/66/000/006/V047/V047

AUTHOR: Kirilyuk, N. I.; Bulka, S. N.; Kalinin, V. S.; Galuzinsky, M. S.

TITLE: Modernization of the "Dnepr" Control Computer

SOURCE: Ref. zh. Kibernetika, Abs. 6V317

REF SOURCE: Sb. Upravlyayushchiye mashiny i sistemy, Vyp. 2, Kiyev, 1965,
35-50

TOPIC TAGS: control computer, computer/Dnepr computer, Dnepr control
computer

ABSTRACT: A report is made on the results of modernization of the "Dnepr" Control Computer in 1961-63 by teams of the design offices of a Computer Manufacturing Plant in cooperation with the Institute of Cybernetics, AN UkrSSR.

The output of modernized computers started in April, 1964. In the modernized machine, welded structure with standard rolled carbon angle steel was used in all cabinets; for the external design--stamped components of one specific type were used. This made it possible to standardize cabinets of UAU, USO, OZY, and PZU equipment and fabricate them in one shop. Particular attention was given to the

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UDC: 681.142.001.3:51

40 B

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ACC NR: AR6031709

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cooling system of the machine. In order to develop its operational and technical properties, the memory capacity was increased, and the possibilities of connecting the machine to the controlled object were enlarged, for which several new USO units were developed. The possibility of connecting the machine to outside devices was expanded and the development of both standard and nonstandard components was completed. The basic modifications of the machine in the various stages of modernization are described. Orig. art. has: 5 figures. B. Golovitsyn. [Translation of abstract]

[FM]

SUB CODE: 09/

hs

Card 2/2

KALININ, V.V.

Artistic principles in the manufacture of machinery.
Mashinostroitel' no.8:16-19 Ag '65.

(MIRA 18:11)

SAPOZHNIKOV, D.G.; KAVUN, V.I.; KALININ, V.V.; ROZHKO, M.N.

Characteristics of the distribution of iron and manganese in the
Karadzhal deposit. Geol.rud.mestorozh. no.4:19-36 Jl-Ag '61.
(MIRA 14:10)

1. Institut geologii rudnykh mestorozhdenii, petrografii,
mineralogii i geokhimii AN SSSR, Moskva.
(Atasu region--Iron ores)
(Atasu region--Manganese ores)

KALININ, V.V.

Metamorphism of ores and enclosing rocks in the Karadzhai deposit
(central Kazakhstan). Geol.rud.mestorozh. no.6:94-104
N-D '62. (MIRA 15:12)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,
mineralogii i geokhimii AN SSSR.
(Kazakhstan—Ore deposits)
(Metamorphism (Geology))

KALININ, V.V.

Friedelite from ferromanganese deposits. Zap.Vses.min.ob-va
91 no.5:605-609 '62. (MIRA 15:11)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,
mineralogii i geokhimii AN SSSR, Moskva.
(FRIEDELITE)

L 13849-66 EWT(l)/EWA(h) GW
ACC NR: AR6000821

SOURCE CODE: UR/0169/65/000/009/D025/D025

SOURCE: Ref. zh. Geofizika, Abs. 9D175

AUTHOR: Kalinin, A. V.; Azimi, Sh. A.; Kalinin, V. V.

TITLE: Explorational possibilities of the echo sounding method and high frequency seismic prospecting in studies of natural deposits

CITED SOURCE: Sb. Geofiz. issledovaniya. No. 1. M., Mosk. un-t, 1964, 269-278

TOPIC TAGS: seismic prospecting, seismic wave

TRANSLATION: The authors compare the depth of seismic prospecting using vibrators which emit radio pulses and a source of the "explosive"- "discharge" type which radiates a video pulse. The problem is studied analytically for square, bell shaped and exponential pulses propagated as a plane wave in a medium with linear and quadratic attenuation. For a square video pulse, the energy decreases as the square of the distance (for linear attenuation) or as the first power of the distance (for a quadratic relationship between the attenuation factor and frequency). For radio pulse excitation, the energy decrease is faster than exponential. For an electrohydraulic

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UDC: 550.834

L 13849-66

ACC NR: AR6000821

pickup with a power of 100 kw and a pulse duration of 10 μ sec, the depth of penetration into the deposit is 420 m, while a radio pulse with a power of 10 kw, a frequency of 10 kc and a duration of 2 msec gives a prospecting depth of 30 m (intensity of ocean noises is taken as 10^{-8} w/m²). Thus sources of the "explosive" type assure greater prospecting depth and require no complex technical equipment, while the attainment of similar depths with echo sounding vibrators involves serious technical difficulties.

SUB CODE: 08

PC
Card 2/2

L 12837-66 EWT(1)/EWA(h) GW

ACC NR: AR6000820

SOURCE CODE: UR/0169/65/000/009/D025/D025

SOURCE: Ref. zh. Geofizika, Abs. 9D174

AUTHOR: Kalinin, A. V.; Azimi, Sh. A.; Kalinin, V. V.

TITLE: Some problems in the excitation and recording of elastic oscillations during seismic prospecting close to the surface of the earth under a shallow sea

CITED SOURCE: Sb. Geofiz. issledovaniya. No. 1. M., Mosk. un-t, 1964, 279-293

TOPIC TAGS: seismic prospecting, elastic oscillation

TRANSLATION: The authors discuss the use of an electrohydraulic (spark) exciter of elastic oscillations during seismic prospecting at shallow depths. The pressure created by the discharge is studied as a function of the capacity of the condenser battery (16-56 μ F) and the applied voltage (3-6 kv). At a fixed voltage, the relationship between capacitance and the resultant pressure is close to theoretical, while the increment in pressure with increasing voltage is faster than theoretical. A study of the shape of the direct and reflected pulse showed that reflection from the rough surface of the water at frequencies from 200 cps to 1.5 kc may introduce

Card 1/2

UDC: 550.834

L 13837-66

ACC NR: AR6000820

considerable distortions in the shape of the pulse even at the low radiation frequency of 1 kc and a small wave amplitude of 15-20 cm. Interference systems are proposed made up of nine pickups or receivers which may be used for directional radiation to substitute a weakly reflecting boundary for the absolutely reflecting air-water interface. It is shown that a spark emitter with a power of 300-500 w and an excitation frequency of 1 cps may be used for studies to depths of 50-100 m. The necessary average power may be cut in half by using storage of electrical energy.

SUB CODE: 08

cc

Card 2/2

L 29587-66 EWT(1) CW/CD
ACC NR: AT6014341 (N)

SOURCE CODE: UR/0000/64/000/000/0279/0293

AUTHOR: Kalinin, A. V.; Azimi, Sh. A.; Kalinin, V. V.

ORG: none

425
B+1

SECRET

TITLE: Some problems in excitation and registration of elastic vibrations during seismic prospecting at shallow depths in shoals

SOURCE: Moscow. Universitet. Kafedra geofizicheskikh metodov issledovaniya zemnoy zory. Geofizicheskiye issledovaniya (Geophysical research), no. 1. Moscow, Izd-vo Mosk. univ., 1964, 279-293

TOPIC TAGS: elastic wave, seismic prospecting, seismologic instrument, electro-hydraulic effect, pressure transducer

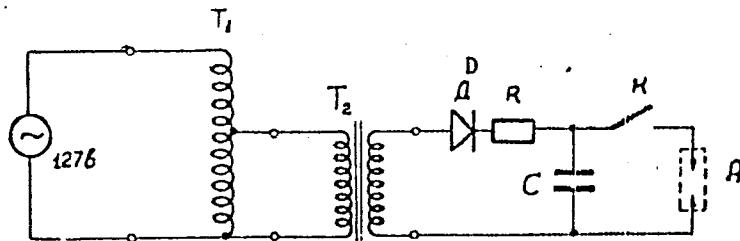
ABSTRACT: The paper is a report on tests of a seismic transducer based on the electro-hydraulic effect for shallow seismic prospecting under the sea. It is shown that this instrument is an effective means for excitation of seismic waves at shallow depths. Experiments and theoretical consideration show that the electrohydraulic transducer may be used for studies at depths of up to 50-100 m at an average electric power of the order of 300-500 w with an excitation frequency of 1 cps. The use of this transducer in directional systems of excitation and reception reduces interference from parasitic waves reflected from the rough surface of the water. A method is described for accumu-

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L 29587-66

ACC NR: AT6014341

lation of electric energy with an efficiency of 98% which reduces the required average power by a factor of approximately 2. An electric circuit of the pickup is shown in the figure. An ac generator with a ZLS motor was used as the electric power supply.



The voltage from the generator output was sent through an LATR-2 autotransformer to the input of high-voltage transformer T_2 . The high-voltage output was regulated from 3 to 6 kv. The current was rectified by diode D and sent through limiting resistor R to a battery of storage capacitors. This condenser bank had a capacity of 16-56 μf . The electrodes A were submerged in the water. A remote-control relay was used for closing switch K to feed the voltage to electrodes A . A ferroelectric pressure pickup was used for reception of the elastic waves. Orig. art. has: 7 figures, 12 formulas.

SUB CODE: 08/ SUBM DATE: 05Nov64/ ORIG REF: 004

Card 2/2 CC

ACC Nr: AP6017982

(N)

SOURCE CODE: UR/0413/66/000/010/0085/0085

INVENTOR: Kalinin, A. V.; Kalinin, V. V.; Levin, A. S.

ORG: None

TITLE: A seismoacoustic unit. Class 42, No. 181829 [announced by Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 10, 1966, 85

TOPIC TAGS: seismologic station, acoustic detector, hydrologic instrument

ABSTRACT: This Author's Certificate introduces: 1. A seismoacoustic unit for exploration of shallow waters on seas, lakes and rivers. The installation contains an excitation unit, oscillation detectors, units for amplification and filtering, a cathode ray registration device and power supply. Depth of penetration is increased by series connection of an energy converter and storage unit, electric power commutator and electric-spark unit for transmitting elastic oscillations in the excitation unit. 2. A modification of this device designed for effective suppression of the secondary shock generated by electric discharge in a liquid. The discharge electrodes are located in perforated hemispheres of various diameters which are simultaneously used as the second electrode. These hemispheres are mounted on an insulating plate fastened to the lower section of the housing for the oscillation

Card 1/2

UDC: 550.340.19

ACC NR: AP6017982

transmitter. 3. A modification of this device designed for high rates of scanning. Runners are used for mounting the cathode ray tube which records the oscillations on a circular platform. This platform is uniformly rotated by the speed reducer of a DC electric motor. Photographic paper for reproduction of the recording is located in a special channel which has the shape of a cylindrical segment concentric with the platform. 4. A modification of this device in which the quality of the recording is improved by connecting delay cells between the piezoelectric pickups.

SUB CODE: 09, 08/ SUBM DATE: 01Feb65

Card 2/2

ACC NR: AT7000194

SOURCE CODE: UR/0000/64/000/000/0269/0278

AUTHOR: Kalinin, A. V.; Azimi, Sh. A.; Kalinin, V. V.

ORG: none

TITLE: Prospecting potentialities of the echo-sounding method and high-frequency seismic prospecting in investigating bottom sediments

SOURCE: Moscow. Universitet. Kafedra geofizicheskikh metodov issledovaniya zemnoy kory. Geofizicheskiye issledovaniya (Geophysical research), no. 1. Moscow, Izd-vo Nsk. univ., 1964, 269-278

TOPIC TAGS: seismic prospecting, echo sounding, geologic prospecting, oceanography, ~~ocean~~, ocean sediment

ABSTRACT: The depth of seismic prospecting based on the use of vibrators emitting radio pulses and by means of a "detonation-charge" source giving off video pulses is analyzed. The problem is examined analytically for rectangular, bell, and exponential pulses propagating as a plane wave in a medium with linear and quadratic attenuation. For a rectangular video pulse, the energy diminishes in proportion to the square of the distance in linear attenuation or to the first order of distance in the case of the quadratic dependence of the attenuation coefficient on frequency. For radio-pulse excitation, the energy decreases more rapidly. For an electro-

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ACC NR: AT7000194

hydraulic sensor having a power rating of 10^5 w and a pulse duration of 10 μ sec, the penetration depth is 420 m, for a radio pulse with a power of 10 kw, frequency of 10 kc, and duration of 2 μ sec, the depth is 30 m. A sea-noise intensity of 10^{-8} w/m² is assumed. Thus, a "detonation" source assures a greater prospecting depth than the echo-sounding method. Orig. art. has: 1 figure and 35 formulas.

SUB CODE: 08/ SUBM DATE: 05Nov64/ ORIG REF: 004/

Card 2/2

ACC NR: AP6019206

EWT(R)/SEC(R)-2

GK

A (A)

SOURCE CODE: UR/0212/66/000/001/0092/0095

38

B

AUTHOR: Kalinin, A. V.; Kalinin, V. V.; Fataliyev, M. Kh.

ORG: Chair of Geophysical Prospecting Methods

TITLE: New method for seismic exploration of shallow ocean depths

SOURCE: Moscow. Universitet. Vestnik. Seriya 4. Geologiya, no. 1, 1966, 92-95

TOPIC TAGS: oceanographic instrument, wave generator, electrohydraulic effect, ocean dynamics

ABSTRACT: The use of an electrohydraulic elastic wave generator to study ocean water in the region of Kerch and Mirnyy is discussed. The generator was developed on the basis of Yutkin's electrohydraulic effect. In testing the apparatus the capacitance, voltage, electrode intervals, depths of electrode submergence, and salinity varied from 8-200 μ F, 3-15 kV, 3mm-10m, 3-50m, and 0 to 40%. Tests showed that 1) the excited elastic pulse consists of two unipolar pulses; 2) increase in capacitance leads to an increase in amplitude and duration of the initial pulse; 3) even small increases in the depth of submergence of the generator considerably affect the parameters of the initial pulse; 4) an increase in the electrode interval extends the duration of the initial pulse; 5) changes in salinity have almost no effect on the basic parameters of the initial pulse; 6) amplitude of the initial pulse is 0.2-1.5 atm at a distance of 15m.

Card 1/2

UDC: 550.834+551.35

T 40025-55

ACC NR: AP6019206

6m from a generator placed at a depth of 10m; and 7) the amplitudes of first and second pulses increase linearly with an increase in the applied voltage. Pulses of 0,2 msec duration and pass bands of 300-1200 cps and 700-1500 cps, were successfully used in locating layers 2-3m in thickness at depths varying from 40-70m in the Kerch and Mirnyy areas. Pulse durations of 1 msec and a pass band of 70-850 cps were used in the Caspian Sea in locating layers 8-10 m in thickness at depths varying from 200 to 250m.

SUB CODE: 08/

SUBM DATE: 24Dec64/

ORIG REF: 002/

OTH REF: 006

Card 2/2 11b

KALININ, V. V., Cand Agr Sci -- (diss) "Wool productivity and quality of wool in sheep raised in the oblasts of the nechernozem zone /non-black earth zone/ of the RSFSR. (From the examples of the Kalinin, Kaluzh, Moscow, Smolensk, and Tula oblasts)." Moscow, 1960. 20 pp; (All-Union Order of Lenin Agricultural Sciences Academy im V. I. Lenin, All-Union Scientific Research Inst of Animal Husbandry); 150 copies; price not given; (KL, 26-60, 141)

KALININ, V.V., kand.geol-mineral.nauk

Genetic types and geochemistry of manganese deposits; interdepartmental conference. Vest. AN SSSR 35 no.7:82-84 Jl 165.

(MIRA 18:8)

BOMBCHINSKIY, V.P.; VTOROV, N.A.; DUNDUKOV, M.D.; YEGOROV, S.A., doktor tekhn.nauk, prof.; YERMOLOV, A.I.; ZAVORUYEV, V.P.; KALININ, V.V.; KACHEROVSKIY, N.V.; KUZNETSOV, A.K.; KUZ'MIN, I.A., kand.tekhn.nauk; MEDVEDEV, V.M., kand.tekhn.nauk; MIKULOVICH, B.F.; MIKHAYLOV, V.V., kand.tekhn.nauk; PETRASHEN', R.N.; REYZIN, Ye.S.; SINYAVSKAYA, V.M.; KHAIKURIN, A.D.; SHCHERBINA, I.N., kand.tekhn.nauk; SEVAST'YANOV, V.I., red.; KARAUOV, B.F., retsenzent; LOVETSKIY, Ye.S., retsenzent; MIKHAYLOV, A.V., doktor tekhn.nauk, retsenzent; NATANSON, A.V., retsenzent; SOKOL'SKIY, M.M.; retsenzent; STANKEVICH, V.I., retsenzent; FREYGOFFER, Ye.F., retsenzent; GOTMAN, T.P., red.; VORONIN, K.P., tekhn.red.

[Work of the All-Union Scientific Research Institute for the Study and Design of Hydraulic Structures] Nauchno-issledovatel'skie raboty Gidroproyekta. Pod obshchei red. V.I. Sevast'yanova. Moskva, Gos.energ.izd-vo, 1961. 214 p. (MIRA 15:2)

1. Moscow. Vsesoyuznyy proyektno-izyskatel'skiy i nauchno-issledovatel'skiy institut Gidroproyekt imeni S.Ya.Zhuk. Nauchno-issledovatel'skiy sektor.

(Hydraulic engineering--Research)

KALININ, V.V., inzhener.

In the State Institute for Planning Oxygen Industry Installations,
Kislorod 10 no.2:44-45 '57. (MLRA 10:9)
(Oxygen--Industrial applications)

5(0)

SOV/67-59-4-18/19

AUTHORS:

Bondarenko, N. I., Engineer, Kalinin, V. V., Engineer,
Samarin, B. P., Engineer, Vagin, Ye. V., Candidate of Chemical
Sciences, Petukhov, S. S., Candidate of Technical Sciences

TITLE: Answers to Readers

PERIODICAL: Kislorod, 1959, Nr 4, p 53 (USSR)

ABSTRACT:

Question (A. Ye. Bykov, Tekeli, Kazakhskaya SSR): How do you explain the pressure increase in the second stage of the air compressor in the SK-05 apparatus? Answer (N. I. Bondarenko): By the resistance increasing with the passage of air through the decarbonizer. Question (L. G. Konyukh, Kemerovo): Does the USSR manufacture oxygen compressors with capacities of 150 - 200 m³/hour? Answer (V. V. Kalinin): Yes, the types 2RK-2/4 (120 m³/hour) and 2RK-4/5 (220 m³/hour). Question (N. V. Volodina, Stalinogorsk, Tula oblast'): Is oxygen stored in wet gas containers? Answer (B. P. Samarin): Yes, according to the plan of the GPI "Proyektstal'konstruktsiya" and the GIAP, since 1957. 1st Question (V. N. Ol'khovik, Pervomayskiy, Tula oblast'): Which are the purifying methods used today for

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Answers to Readers

507/67-59-4-18/19

raw crypton? Answer (Ye. V. Vagin, S. S. Petukhov): The principal methods are enumerated and explained. 2nd Question: Is it possible to use NaOH instead of KOH to dry the crypton concentrate? Answer: It is, but under certain conditions.

Card 2/2

KALININ, Vasiliy Vasil'yevich; SAPOZHNIKOV, D.G., doktor geol.-
miner. nauk, otd. red.

[Iron-manganese ores of the Karadzhal deposit] Zhelezo-
mangansevye rudy mestorozhdeniya Karadzhal. Moskva,
Nauka, 1965. 122 p. (MIRA 18:12)

KALININ, V.V., arkhitektor; DARDIK, N.B.; AKUTIN, M.S.

Experimental plastic house with a reinforced concrete frame.
Gor. khoz. Mosk. 32 no.8:8-13 Ag '58. (MIRA 11:9)

1. Direktor zavoda No.6 Glavmoszhlezobetona (for Dardik).
2. Direktor Nauchno-issledovatel'skogo instituta plasticheskikh
mass (for Akutin).
(Plastics) (Apartment houses)

BORISOV, V.I.; LEVIT, Z.Yu., inzh.; KALININ, V.Z., inzh.; BROVKIN, M.G.,
inzh.; AGALTSOV, N.V., inzh.; ZHIGACHEVA, T.F., inzh.; LOBANOV,
V.S., inzh.; ALIMOV, M.F., inzh.; VIKSMAN, I.M., inzh.; LAZAREV,
V.Ya., inzh.; ZALEVSKAYA, L.V., tekhnik; SHCHETVINA, R.F., tekhnik;
SOKOLOVSKIY, I.A., red.; SHALAGINOV, A.A., vedushchiy red.

[Special and basic equipment of mechanical assembly shops in
instrument plants] Neklassifikovannye oborudovaniye i orgosnastka mekhanicheskikh
sborochnykh tsekhov priborostroitel'nykh zavodov. Moscow,
Otdel nauchno-tekhn. informatsii, 1959. 158 p.

(MIRA 15:4)

(Instrument industry—Equipment and supplies)

KALININ, Ya.V., kand.tekhn.nauk

New type of current transformer for a low-oil-content circuit
breaker (from "Power apparatus and systems," no.4, 1956).
Energokhoz. za rub. no.5:13-14 S-0 '57. (MIRA 13:6)
(Electric transformers)

SHKATOV, Ye.F.; KALININ, Ye.Kh.

Stand for testing blocks of automatic tracking systems, Nefteperni
i neftekhim. no.11834-35 '64 (MIRA 1852)

1. Yaroslavskiy nefteperstatyvayushchiy rassod.

L 24030-66 EWT(1)/EWP(m)/EWA(d)/EWA(1) NW

ACC NR: AP6010851

SOURCE CODE: UR/0421/66/000/001/0128/0130

50
B

AUTHOR: Kalinin, Ye. M. (Moscow)

ORG: none

TITLE: Flow over permeable cone at an angle of attack

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 1, 1966, 128-130

TOPIC TAGS: supersonic aerodynamics, supersonic flow, aerodynamic moment, aerodynamic lift, aerodynamic drag, conic body

ABSTRACT: This paper deals with the problem of a permeable cone in supersonic flow at an angle of attack. It is assumed that the cone surface is uniformly permeable, the angle of attack is small, and the pressure p_1 inside the cone is constant with $p_1 < p_{2\min}$, where $p_{2\min}$ is the minimum surface pressure on the impermeable cone with the same flow regime. This problem is reduced to the solution of the equation of flow potential which presented as the sum of three potentials $\phi = \phi_1 + \phi_2 + \phi_3$, where ϕ_1 is the potential of a plane-parallel flow of velocity $V \sin \alpha$; ϕ_2 is the potential of an axisymmetrical flow past a cone and independent from θ ; ϕ_3 is the potential which takes non-symmetrical effects into account. Expressions are derived for lift and drag coefficients and for the aerodynamic moment with respect to the cone apex. Orig. art. has: 9 formulas.

[20]

SUB CODE: 20/ SUBM DATE: 14Jul65/ ORIG REF: 002/
Card 1/1ddo

KUCHERA, Jaroslav[Kucera, Jaroslav]; GAPL, Yozef[Hapl, Josef]; GELLER,
Bedrzhikh [Heller, Bedrich], akademik, laureat gosudarstven-
noy premii, inzh. doktor, nauchnyy red.; KALININ, Ye.M., inzh.,
red.

[Windings of rotary machines] Obmotki elektricheskikh vra-
shchatel'nykh mashin. Prague, Izd-vo Chekhoslovatskoi akad.
nauk, 1963. 981 p. (MIRA 16:4)
(Electric machinery--Windings)

KALININ, Ye.N., tekhnik-mekhanik

Mechanized filling standpipe. Neftianik 7 no.9±18 S :62.
(MIRA 16±?)

1. Tambovskaya neftebaza.
(Standpipe)

NABIYEV, M.N.; PALETSKIY, G.V.; ANISIMKIN, I.G.; REBENKO, M.; KALININ, Ye.P.; TROFIMOV, S.M.; VURGAFT, G.V.; POPOV, V.S.; KOROL', P.Z.; KULIK, A.A.; KAL'MAN, L.A.; FARBER, S.I.; MATVEYeva, N., Ye.; GAVRILOV, V.S.; KADYROV, V.K.; IL'IASOV, A.I.; YAKUBOV, S.G.; PROSKURIN, M.P.; NESTERENKO, A.P.; DEZHIN, N.D.; KOCHEROV, V., red.; POPOV, V., red.; SALAKHUTDINOVA, A., tekhn. red.

[Chirchik, a city of major industrial chemical complexes]
Chirchik - gorod bol'shoi khimii. Tashkent, Gosizdat UzSSR,
1962. 82 p. (MIRA 16:6)

1. Chlen-korrespondent Akademii nauk UzSSR (for Nabiyev).
2. Rabotniki Chirchikskogo elektrokhimkombinata (for all except Nabiyev, Kocherov, Popov, V., Salakhutdinova).
(Chirchik—Chemical plants)

PENYAZ'KOV, A.V., inzh.; KALININ, Ye.S., inzh.

High-frequency blocking of rapid action feed switches.
Elek. i.tepl. tiaga 7 no.10:8-10 0 '63. (MIRA 16:11)

KALININ, E. V.

PA 16T63

USSR/Insulation - Methods
 Voltages

Jul 1947

"Characteristics of Insulation of High - voltage
Apparatus," E. V. Kalinin, 4 pp

"Vest Elektro Prom" No 7

Describes the various discharge characteristics
of cu' -out switch transformers at high voltage,
154 to 220 kilovolts, and lists the models used
in experiments. Tabular record of results.

Zavod "Uralelektroapparat"

16188

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000620110008-3

KALININ, Ye.P., inzh.; TOLMACHEV, B.V.

Transistorized level indicator. Friborostroenie no. 2123 Jl 165.
(MIRA 18:7)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000620110008-3"

KALININ, YE. V.

PA 66/49T31

USSR/Electronics - Test Equipment Aug 49
Circuits, Electronic

"Parameters of a Capacitative Divider," Ye. V.
Kalinin, Cand Tech Sci, Ural Polytech Inst imeni
Kirov, 5 PP

"Elektricheskvo" No 8

Criticizes Gabor and Burch's selection of
parameters in their circuits for eliminating
distortions caused by wave processes in the
cable joining the oscilloscope and divider.
Designed a divider circuit which permits rapid
calculation of the accuracy of the divider for
any wave form.

66/49T31

Protection

S.A.

Sect. B

621.316.93 : 621.314.234.048
1636. Protection of the inter-turn insulation of the primary windings of current-transformers against voltage surges. R. V. KALININ. Elektrosvit, No. 12, 25-9 (Dec., 1951) *Ex Radium*.

The primary winding of a current transformer, representing a complicated system of self-inductance, mutual inductance, inter-turn and earth capacitance, may for the purpose of calculating the over-voltages be replaced by a pure inductance equal to the leakage inductance of the transformer. The latter may be approximately determined from test data at high currents. The suitability of this equivalent circuit was confirmed by tests with a thyrite disk shunted as a protection across the transformer terminals. As the

volt-ampere characteristic of the disk was known, the impulse current characteristic of the transformer could be found with its help by a difference method. This, in turn, enabled the "dynamic inductance" of the transformer to be found. Tests showed the theoretical results always to be safe. Very accurate conditions for the necessary strength of the inter-turn insulation could be stipulated and the probability of its impulse breakdown leading to permanent damage to the transformer was also determined. The necessity of providing current transformers with surge protection for the insulation of the primary windings was established beyond doubt.

B. P. KRAUS

PALINTIN, YE. V.

Ustanovka Dlya Ispytaniya Nezhdivitkoyeza Isolyatcii
Yakorey Krupnykh Mashin Postoyannogo Toka.
Elektrichestvo No. 4, 1952.
Kandidat Tekhn. Nauk, Dots.

SO: Monthly List of Russian Accessions, Library of Congress, August ² 1953, Uncl.

SYROMYATNIKOV, I.A., doktor tekhnicheskikh nauk (Moscow); DZHANISHIYEV, I.A.,
inzhener; KALININ, Ye.V., kandidat tekhnicheskikh nauk (Leningrad).

Remarks on E.V.Kalinin's article "Protection of the inter-winding insulation of primary transformer windings against overvoltage." Elektrichestvo no.6:66-68 Je '53. (MLRA 6:7)

1. Zavod "Elektroapparat" (for Dzhanihiyev).
(Electric transformers) (Kalinin, E.V.)

KALININ, Ye.V., kandidat tekhnicheskikh nauk, dotsent.

Radio interference caused by high-voltage transmission lines. (From H.I. Rorden and R.S.Gens. El.Eng. No.10, 1952) Elektrichestvo no.9:84-85 S '53.
(MLRA 6:9)
(Radio--Interference)

KALININ, E. V.

Electrical Engineering Abstracts
May 1954
Protection

1971. Use of corona electrodes in external spark gap of explosion-type surge diverter. E. V. KALININ.
Elektrichesvo, 1954, No. 1, 50-3. In Russian.

When explosion-type surge diverters are used for substation protection, it is sometimes necessary to reduce the impulse characteristics of the diverter without reducing its breakdown characteristic at mains frequency below the permissible limits. The author investigated the possibility of improving the diverter characteristics by using corona electrodes in the external spark gap. It is found that such gaps have higher dry-flashover voltages at 50 c/s and lower impulse breakdown voltages compared with horn or rod gaps. The wet flashover voltages, even without rain, and those in a dirty condition are reduced to the values obtained with horn or rod gaps of the same setting. Explosion gaps with external corona gap have higher impulse breakdown voltages owing to the higher capacitance of the corona gap. This voltage may be reduced by shifting or terminating the explosion gap on the side of the serrule. Such a shield also reduces the impulse breakdown voltage when the external gap is of the horn type, its use is therefore always favourable. The mounting of a shield on the outer face of the explosion tube reduces the breakdown voltage of the quenching tube, and it must be used only after testing, if the breakdown voltage of the tube is higher than the amplitude of the recovery voltage of the system. The impulse characteristics of Heilanax diverters become too high if the fibre dries out (e.g. by varnishing) or in very dry climates and may be brought back to normal when the fibre absorbs moisture in a horn. Therefore the diverters of this type should be stored in a room for 2-3 weeks after varnishing and drying before mounting them in the system.

E. P. KRATZ

KALININ, Ye.V., dotsent, kandidat tekhnicheskikh nauk.

Determining partial discharges in the winding slots of high-voltage
rotary machines. (From: El. Eng. Febr. 1952. J.S.Johnson, Mead Warren).
Elektrichestvo no.3:82-84 Mr.'54. (MLRA 7:4)
(Electric machinery)

Kalinin, Ye. V.

AID P - 1041

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 18/23

Author : Kalinin, Ye. V., Kand. of Tech. Sci., Dotsent

Title : Tests of insulators of high voltage transmission lines.
(Review of foreign periodicals)

Periodical : Elektrichestvo, 11, 91-92, N 1954

Abstract : The author summarizes articles from two French publications describing tests of mechanical stresses and influences and of the thermic processes occurring in high voltage insulators. Two graphs, 2 French references, 1951, 1953.

Institution : None

Submitted : No date

KALININ, Ye.V., kandidat tekhnicheskikh nauk.

Short circuit to ground on insulators of high-voltage networks.
Elek.sta. 25 no.12:54-55 D '54. (MLRA 7:12)
(Electric networks) (Short circuits)

KALININ, Ye.V.

AID P - 1611

Subject : USSR/Electricity

Card 1/1 Pub.27 - 20/27

Author : Kalinin, Ye. V., Kand. of Tech. Sci. Dotsent

Title : An impulse generator circuit for chopped-wave tests on
transformers

Periodical : Elektrichestvo, 3, 78-79, Mr 1955

Abstract : The author summarizes an article by G. H. Johnson,
published in v.72, p.3 of A.I.E.E. Transactions,
1953, pp.839-843. Three diagrams

Institution: None

Submitted : No date

KALININ, YE. V.

621,315,614.6

4658. The ionization of oil-impregnated paper insulation. E. V. KALININ. *Elektrichesivo*, 1955, No. 5, 54-9. In Russian.

The ionization set up in oil-impregnated paper insulation by a gradually increased alternating voltage is initially unsteady, and of comparatively small intensity. With further increase of applied voltage the intensity of the ionization rises very considerably and assumes a steady character which is reproducible from one specimen to another. (Characteristic ionization.) The initiation and development of the characteristic ionization are materially influenced by the field of space charges inside the dielectric. This ionization is not observed under steady d.c. conditions, but an analogous type of ionization occurs during transient aperiodical phenomena, except for the fact

that its character is unsteady. This is known as characteristic transient ionization. No steady ionization is set up if the time interval between two subsequent sudden increases of the voltage is so long that the space charges have time to leak away. The critical ionization voltage in a gas inclusion does not depend on the diameter of the bubble (inclusion), the thickness and kind of dielectric neither the location of the bubble (inside the dielectric or near the electrode).

The breakdown voltage, however, depends on the thickness of the bubble. It was found that under otherwise equal conditions, capacitors impregnated with pentachlorodiphenyl are much more stable in operation than capacitors with mineral-oil-impregnated insulation. The highest permissible field strengths are obtainable with capacitors assembled of sections with a dielectric consisting of the thinnest available paper and with 3-6 layers of this paper between the electrodes.

B. F. KRALIS

KALININ, Ye.V.

AID P - 2360

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 24/30

Author : Kalinin, Ye. V., Kand. of Tech. Sci.

Title : Emergence of arc in low-voltage installations during impulse discharges (Review of foreign periodicals)

Periodical : Elektrichestvo, 5, 84, My 1955

Abstract : The author summarizes an article by W. Baumann in the Bulletin of the ASE, v.45, p.465, No.12, 1954, concerning an investigation of fires caused by the emergence of arc discharges in the service conductors of low-voltage networks. One reference.

Institution: None

Submitted : No date

AID P - 2948

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 13/15

Author : Kalinin, Ye. V., Kand. of Tech. Sci., Dotsent

Title : Method of detection of impulse corona

Periodical : Elektrichestvo, 8, 84-85, Ag 1955

Abstract : The author summarizes an article by J. H. Hagenguth and T. W. Liao on the detection and measurement of intensity and of damage produced by impulse corona. The article appeared in A.I.E.E. Transactions, v. 71, p. III, 1952. Three diagrams, 1 reference.

Institution : None

Submitted : Not given

Kalinin Ye. V.

AID P - 3459

Subject : USSR/Electricity
Card 1/1 Pub. 27 - 26/32
Author : Kalinin, Ye. V., Kand. of Tech. Sci., Dotsent
Title : Influence of the paper thickness upon the ionization
of high-voltage cables (Review of foreign periodicals)
Periodical : Elektrichestvo, 10, 76-77, O 1955
Abstract : The author summarizes an article by J. Oudin and H.
Thevenon in Revue Générale de l'Électricité, v. 62,
p. 581, No. 2, 1953, concerning measurements of the
degree of ionization of high-voltage cables as depen-
dent upon the thickness of the insulating paper.
One diagram.
Institution : None
Submitted : No date

KALININ, Ye.V., kandidat tekhnicheskikh nauk, dotsent.

Nondestructive testing of materials using X rays yielded by a
betatron. Elektrichestvo no.2:88-89 F '56. (MLRA 9:5)
(Materials--Testing) (X rays--Industrial applications) (Particle
accelerators)

GERTSIK, A.K., inzhener; KALININ, Ye.V., kandidat tekhnicheskikh nauk;
KORSUNTSEV, A.V., kandidat tekhnicheskikh nauk; MERKHALOV, S.D.,
inzhener.

Reinforced insulator strings for overhead lines. Elektrichestvo
no.3:69-72 Mr '56. (MIRA 9:6)

1.Nauchno-issledovatel'skiy institut postoyannogo toka.
(Electric insulators and insulation)

~~KALININ, Ye.V., kandidat tekhnicheskikh nauk, dotsent.~~

Pulse stabilization (from "ITZ - A" no.11 '55). Reviewed by
E.V.Kalinin. Elektrichestvo no.9:85 '56. (MLRA 9:11)
(Oscillators, Electron-tube)

KALININ, Ye.V., kandidat tekhnicheskikh nauk.

Using a semiconducting coating on porcelain insulators. Elektri-
chestvo no.10:90-92 O '56. (MLRA 9:11)
(Electric insulators and insulation) (Semiconductors)

KALININ, Ye.V., kandidat tekhnicheskikh nauk.

Electric and mechanical characteristics of SP-110 stick insulators.
Elek. sta. 27 no.10:55-57 0 '56. (MLRA 9:12)
(Electric insulators and insulation)

KALININ, Ye.V., dotsent, kandidat tekhnicheskikh nauk.

Internal mechanical stresses in porcelain insulators. Elektrichestvo
no.1:89-92 Ja '57. (MLRÄ 10:2)
(Electric insulators and insulation)

KALININ, Ye.V., kandidat tekhnicheskikh nauk, dotsent.

Investigation of disruptive discharges in the insulation of
high voltage cables (from "Power Apparatus and Systems," no.22,
1956). Elektrichestvo no.4:89-90 Ap '57. (MLRA 10:5)
(Italy--Electric cables)

KALININ, Ye.V., kandidat tekhnicheskikh nauk, dotsent.

Method of studying transient voltage recovery. Elektrичество
no.10:88 O '57. (MLRA 10t9)
(Electric networks)

KALININ, Ye.V., kand.tekhn.nauk

Measuring dielectric losses by the bridge method on a frequency
other than 50 cycles in the presence of electromagnetic effects.
Elek.sta. 28 no.10:58-59 '57. (MIRA 10:11)
(Electric measurements)

AUTHOR: Kalinin, Ye. V., Docent, Candidate of Technical Sciences 105-58-3-27/31

TITLE: The Solubility of Gases and of Water in Transformer Oil
Rastvorimost' gazov i vлаги в трансформаторном масле)

PERIODICAL: Elektrotehnika 1958, Nr 3, pp. 91-93 (USSR)

ABSTRACT: Here the influence of atmospheric conditions on the water and air content of oil being in contact with the open air, furthermore the influence of the dissolved humidity on the electrical properties of the oil is shown, and a number of new methods of oil control are described. The saturation with humidity was performed according to the dynamic and the static method, both furnishing identical results: a straight dependence of the logarithm of the maximum solubility of water in oil on the inverse value of the absolute temperature. It was found in the investigation of the relative solubility, that the value of the absorption of water by oil, given as percentage of the maximum solubility of water at the respective temperature, exactly equals the relative atmospheric humidity in percent (when oil and water have the same temperature).

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The Solubility of Gases and of Water in Transformer Oil

105-58-3-27/31

There are 6 figures and 4 references.

Card 3/3

KALININ, Ye.V., kand. tekhn. nauk, dots.

Economic of inductive energy storage (from "Communications and
Electronics," 31 1957). Elektricheskoe no. 4:79-80 Ap '58.
(Electric coils) (MIRA 11:5)

AUTHOR: Kalinin, Ye. V., Descent, Candidate of Technical Sciences 105-58-6-28/33

TITLE: Explosion and Ignition in the Testing of High-Voltage Apparatus (Vzryv i vozgoraniye pri ispytanii vysokovol'tnykh apparator)

PERIODICAL: Elektrichestvo, 1958, Nr 6, pp. 91-92 (USSR)

ABSTRACT: Explosion in the current transformer. in the determination of the voltage in the dry discharge of a test current transformer with 220 kV it was supposed that a discharge took place in the container at the surface of the oiled paper insulation. For checking this a 500 kV voltage was applied. At the first moment the transformer stood the voltage, but shortly afterwards a strong explosion took place in the head of the transformer. The investigations showed the cause: during the surface-discharge at the paper-insulation of the winding, part of the oil was decomposed. One of the decomposition products is hydrogen. This latter together with the oxygen of the air cushion formed an oxy-hydrogen mixture which was ignited by the spark of the capacitative discharge between the thermocouple elements or the thermocouple element and the casing of the head. The computation showed that 46 g oxygen in the air cushion in the case of saturation

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Explosion and Ignition in the Testing of High-Voltage Apparatus 105-58-6-28/33

with hydrogen from an oxyhydrogen mixture with 17 atmospheres absolute pressure. It is to be assumed that the explosion would not have taken place if the hydrogen had been able to escape and if the ignition spark of the thermocouple elements had not been produced in the head.

Ignition by capacitative currents. Dielectric losses were measured in a 400 kV leadin condenser. The lower end of the leadin 2m in length was dipped into a container with oil. A metal ball of 500 mm was fastened to the lower end of the leadin. A platform of plain boards covered with electric cardboard and plywood was laid upon the upper edge of the container. When fire was observed at the platform at 300 kV, the voltage was switched off. The examination showed that the electric field of the leadin at the moist platform of boards applies a voltage of several dozens of kV in the case of 200 kV at the leadin. On that occasion the moist boards play the part of an electrode which accepts the potential in an electric field.

1. Electrical equipment--Test methods 2. Transformers--Failure
3. Insulation (Electric)--Decomposition 4. Dielectrics--Hazards

Card 2/2

AUTHOR: Kalinin, Ye. V., Candidate of Technical Sciences SOV/105-58-9-25/34

TITLE: Influence of Electrode Surface on the Breakdown Voltage of Transformer Oil (Vliyaniye ploshchadi elektrodev na probivnoye napryazheniye transformatornogo masla)

PERIODICAL: Elektrichestvo, 1958, Nr 9, pp 86 - 92 (USSR)

ABSTRACT: As the authors of references 1 and 2 stated, the distribution of breakdown voltage values for breakdown of oil in a homogeneous field quantitatively and qualitatively follows the theorem of statistical fluctuations (Ref 3), as expressed by formula (1). Test results have shown that for all oil sorts tested, and for both electrode positions (horizontal, and vertical), the distribution of breakdown voltages is represented exactly by this statistical law. From this law, which is based on the principle of the decisive influence of preferred breakdown spots, it follows that it makes no difference whether the electrode surface, or the breakdown number without a change of

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Influence of Electrode Surface on the Breakdown
Voltage of Transformer Oil

SOV/105-58-9-25/34

electrode surface, is increased tenfold. Finally the author states that breakdown of oil is decisively influenced by preferred spots, and that in examining oil breakdown data one must consider the number of tests made as well as the surface and shape of electrodes used. There are 3 figures, 1 table, and 4 references, 0 of which is Soviet.

Card 2/2

KALININ, Ye.V., kand. tekhn. nauk

New designs of distributing devices and new insulation materials.
Energokhoz. za rub. no.2:33-38 Mr-Ap '59. (MIRA 12:5)
(Electric power distribution--Equipment and supplies)
(Electric insulators and insulation)

KALININ, Ye.V., kand.tekhn.nauk

Dispersal of breakdown voltages of valve arresters at industrial
frequency. Vest.elektrprom. 31 no.1:30-33 Ja '60.
(MIRA 13:5)
(Lightning protection)

S/196/62/000/004/012/023
E194/E155

AUTHORS: Kalinin, Ye.V., Merkhalev, S.D., and Ryabov, B.M.

TITLE: Breakdown voltages of air gaps of various shapes
with direct and pulsating voltages

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.4, 1962, 24-25, abstract 4 E174. (Izv. N.-i. in-ta
postoyan toka, no.7, 1961, 26-35).

TEXT: Breakdown voltages are given for the following gaps
in air: rod-rod, rod-plate, conductor-plate, and rod-sphere
with direct and pulsating voltages. The tests were carried out
on a 1500 kV rectifier installation which consists of two
series-connected 3-stage cascade rectifying generators each of
750 kV and also of a 1000 kV rectifier installation. Pulsating
voltage tests were made with a circuit in which direct voltage
was applied to one electrode of the gap and alternating to the
other. The test results for the gaps are given in the table.
Breakdown voltages for rod-plate and rod-rod gaps obtained in the
Kiyevskiy politekhnicheskiy institut (Kiev Polytechnical Institute)

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Breakdown voltages of air gaps ...

S/196/62/000/004/012/023
E194/E155

are lower than those of the NIIPT gaps by 9% with positive polarity and by 5% with negative. Up to 800 kV, breakdown voltages with pulsating and direct voltages coincide; with alternating voltage the data of the Kiev Polytechnical Institute are somewhat higher. In designing d.c. air gaps of ± 400 kV class for transmission lines it is recommended to take a gradient of 4.9% kV/cm. For d.c. transmission lines of higher voltage class the selection of air gaps requires further investigation.

8 illustrations, 2 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

KALININ, Ye.V.

Moisture discharge characteristics of suspension insulators at
50 c.p.s. alternating current. Izv. NIIPT no.7:176-189 '61.
(MIRA 14:9)

(Electric lines--Overhead)
(Electric insulators and insulation)

KALININ, Ye.V.; SOLOMONOV, N.M.

Heat resistance and aging of hard glass insulators. Izv. NIIPT
no.7:190-202 '61. (MIRA 14:9)
(Electric insulators and insulation) (Electric lines--Overhead)

KALININ, Ye.V., kand.tekhn.nauk

Effect of the design of suspension insulators on the magnitude of
their moist-state discharge potential. Elek. sta,32 no. 5:62-65
My '61. (MIRA 14:5)

(Electric lines—Overhead) (Electric insulators and insulation)